

## CLAIMS

1. A method of producing a foundation (15, 35) for a scale (24, 44) on a gyro ring (3, 7) in a gyro suspension of an arm in a parallel-kinematic machine, wherein the gyro ring (3, 7) is provided with bearing pins (5, 9) which are worked in a securely fixed state, characterized in that the scale-carrying foundation (15, 35) is worked in one and the same fixed state without changing the fixed state between working of the bearing pins (5, 9) and working of the foundation (15, 35) carrying the scale (24, 44).
2. A method according to claim 1, characterized by working the foundation (15, 35) and the bearing pins (5, 9) in the form of a lathe-turning operation and/or a grinding operation.
3. A method according to any one of claims 1-2, characterized in that work on the foundation (15, 35) and work on the bearing pins (5, 9) is effected simultaneously.
4. A method according to any one of claims 1 -3, characterized in that the scale markings (23, 43) for the scale (24, 44) are provided in the foundation (15, 35) in one and the same fixed state without changing said state.
5. A scale arrangement produced by a method according to any one of claim 1-4, wherein the arrangement includes scale markings (23, 43) which form a scale (24, 44) on a gyro ring (3, 7) for gyro suspension of an arm in a parallel-kinematic machine, said gyro ring (3, 7) being provided with cylindrical bearing pins (5, 9), characterized in that a foundation (15, 35) for said scale markings (23, 43) is formed in the gyro ring (3, 7) either as a cylinder-sector surface (21) or as a planar circle - sector surface (41) on which the scale markings (23, 43) are disposed.
6. An arrangement according to claim 5, characterized in that the scale markings (23, 43) on the foundation (15, 35) form either a cylinder-sector shaped scale (24) or a circle-sector shaped scale (44), said scale (24, 44) being placed concentrically with the bearing pins (9).

7. An arrangement according to claim 6, characterized in that the scale (24) is disposed externally on the cylinder surface (21).
8. An arrangement according to claim 6, characterized in that the scale (44) is disposed on the planar circle-sector surface (41).
- 5 9. An arrangement according too any one of claims 5-8 characterized in that the foundation (15, 35) is comprised of part of the gyro ring (3, 7).
10. An arrangement according to any one of claims 5-9, characterized by a reader (37, 38) which is mounted to define a gap with the scale (24, 44) such that the reader (37, 38) will register the angular position of the gyro ring (3, 7) in relation  
10 to a reference surface (34, 36).
11. An arrangement according to claim 10, characterized in that the reference surface (34, 36) is located in a foundation (39) and/or on the outer gyro ring (7).